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ABSTRACT

This study examined career paths and job satisfaction of teachers completing their preparation and entering the profession during the 1980s. Annual follow-up studies of teacher education graduates at the institution during the year after graduation over several years have indicated from 45 to 55 percent of the graduates were employed as full-time teachers in public or private schools during the school year following program completion. Many others indicated that they intended to teach in the future. The study was undertaken to determine to what extent program graduates became a part of, and were likely to remain in, the teaching profession in the years after graduation. Because of changes occurring in the profession and the preparation program at various points in time, data from cohorts are examined separately to look for possible effects of time of exit from the program. A random sample of 100 graduates completing teacher certification requirements at the University of Tennessee was selected for the study from each of four cohorts: 1979-80, 1981-82, 1983-84, and 1985-86. The relationship between years of teaching experience and job satisfaction is moderate and not strictly linear. In general, the teachers with the least amount of experience were most satisfied, while the highest levels of dissatisfaction were evident at completion of the 4th, 5th, and 7th years. Because teachers delay entry, enter, and leave at various times, it would probably be erroneous to decide that data taken at any one period accurately reflects the contribution of a cohort to the teaching work force. (JD)

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CAREER PATTERNS AND JOB SATISFACTION OF TEACHER EDUCATION GRADUATES

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Introduction

Early studies on teacher attrition provided a background for current studies on teachers' careers. Coming from an employer perspective, data were taken from school systems or state employment records to assess the extent of teacher turnover from one year to the next or across several years, and the characteristics, particularly length of teaching experience, of those staying and those leaving (Charters, 1970; Mark & Anderson, 1978). Estimates of the numbers of teachers leaving the profession may have been misleading because they failed to take into account the reentry behavior of teachers.

Charters (1970) found that male teachers remained in the field longer than females in Oregon, and that attrition was rapid after the fourth year of teaching. Later research by Mark and Anderson (1978, 1985) on teachers who entered the profession from 1968 through 1975 found the gender difference decreasing as well as attrition rates. Based on records of Washington D.C. teachers in 1979-1983, Grissmer and Kirby (1987) noted that attrition from the teaching profession was highest for young, least experienced teachers and for those nearing retirement. Males were also subject to higher attrition rates than females during the first five years of teaching. Grissmer and Kirby estimated the probability of a new teacher remaining through the fifth year of teaching was 30% for men and 50% for women.

According to census data (Talbert, 1986), over one third of the teachers in 1965 were not teaching five years later, with the highest percentages of those leaving being the youngest (under 30 years of age) and those nearing retirement. More recently, using the data base from the national longitudinal study of high school seniors of 1972, Heyns (1988) found attrition rates for those who had been teaching five years previously were fairly stable in 1981-82, 1982-83, and 1983-84 (37.1%, 38.3%, and 37.4%, respectively), before declining in 1984-85 (30.1%). Heyns also found that by 1986, 25.2% of those certified to teach or completing teacher preparation programs had never taught.

Estimates of attrition from the teaching profession vary but are considerable from all sources. Vance and Schlechty (1982) also using data from the national longitudinal study of high school graduates of 1972, found that over half of those teaching planned to leave the profession before they were 30 years old. Metropolitan Life Insurance Company (1988), reporting on a nationwide survey of teachers, found that 33% of the males currently teaching and 24% of the females were likely to leave teaching within five years although career dissatisfaction was at an all-time low of 13% for the five-year period from 1984 through 1988. As has been true in previous research, the highest percentages of prospective career changers were those with less than five years experience and those with 20 or more years teaching experience.

It is only recently that research has considered the reentry behavior of teachers. Talbert (1986) recognized that women are particularly likely to interrupt their careers to have children, but Price's (1988) teacher career cycle does not recognize career interruption and is not gender specific. Price listed the following stages in the progression through a teaching career: 1. preservice; 2. induction; 3. competency building; 4. enthusiastic and growing; 5. career frustration; 6. stable and stagnant; 7. career wind-down; 8. career exit.

Chapman (1984), surveying graduates of years past dating back to 1946, used a three-category system: those who taught continuously, those who started but left teaching within five years, and those who never taught. Those who taught continuously were less satisfied with their jobs than those who had never taught. In a later study of graduates from 1963, 1967, and 1971, Chapman (1986) expanded the categories to include a fourth group consisting of those who started teaching, left, and returned to teaching (intermittent teachers). The intermittent teachers differed from those who left teaching permanently on initial commitment to teaching, quality of first teaching experience, and likelihood of remaining in their present job in the foreseeable future. In both studies, data were collapsed across year of graduation so changes between cohorts were not examined.

Mumane, Singer and Willett (1988) focused on the reentry behavior of many teachers, particularly young females who may leave the profession temporarily because of childrearing. They collected their data by following the progress of teachers in Michigan who began teaching in 1972 or 1973 for a period of 12 years. Their findings were supportive of earlier research regarding the length of time teachers remain in the field but demonstrate the inadequacy of previous studies that fail to consider the return of teachers to the classroom and include the teachers who have left teaching only temporarily among those having made a permanent career change. The researchers predicted a median first spell of teaching for young women (under age 30) of 5.7 years, with 31% of them subsequently returning to teaching. For young men, the median first spell was 10.8 years, with only 25% returning after leaving teaching.

Career satisfaction, although it has been defined and measured in various ways, is an important factor in teachers' decisions to persist in teaching (Chapman, 1983). Research has shown a positive relationship between career satisfaction and persistence, teacher's gender, self-rated skills, values and accomplishments; age, and life satisfaction. If there is a relationship to persistence, career dissatisfaction may precede exit from the field. Shirom and Mazeh (1988) found the highest levels of job satisfaction for Israeli junior high school teachers (with from one to 23 years experience) for those with two, seven, 11-12, 17, and 21-22 years experience. The greatest dissatisfaction was shown at four, ten, 14-15, and 20 years of teaching. If dissatisfaction is, indeed a precursor to withdrawal from teaching, the high level of dissatisfaction of fourth year teachers may support predictions that many teachers leave teaching within five years (Metropolitan Life Insurance Company, 1988).

These studies have been based on graduates who began teaching prior to 1980 and, in many cases, data collection was completed prior to that time. Changes in the teacher supply-demand situation have occurred in recent years as well as in teacher preparation programs. Along with an increase in the need for teachers has come a demand for better

preparation of prospective teachers, recommended by both the Holmes Group and the Carnegie report (Murray, 1986; Tucker & Mandel, 1986), and greater accountability once they enter the profession. As yet, studies on teacher attrition have not kept pace by studying what happens to teachers prepared to enter the profession during the 80s.

Purpose

The purpose of this study was to examine career paths and job satisfaction of teachers completing their preparation and entering the profession during the 80s. A second purpose of the study was to determine the career patterns of graduates of a particular institution. Annual follow-up studies of teacher education graduates at the institution in which the current research was conducted during the year after graduation over several years have indicated from 45% to 55% of the graduates were employed as full-time teachers in public or private schools during the school year following program completion, although many others indicated that they intended to teach in the future. This study was undertaken to determine to what extent program graduates became part of and were likely to remain in the teaching profession in the years after graduation. Because of changes occurring in the profession and the preparation program at various points in time, it is important to initially examine data from cohorts separately to look for possible effects of time of exit from the program.

Method

Sample

A random sample of 100 graduates completing teacher certification requirements at the University of Tennessee was selected from each of four cohorts: 1979-80, 1981-82, 1983-84 and 1985-86. The cohort included graduates from fall quarter through the subsequent summer quarter to consist of graduates who were part of the pool qualified to begin full-time teaching in the fall. At the time of the survey, the graduates in these groups would have been completing three, five, seven, and nine years of teaching if they had entered the profession the fall after graduation and taught each year. These cohorts

were selected to provide an overview of the progression through career stages following program completion.

Annual follow-up studies of graduates had been conducted with each of these groups in the year following program completion. Individuals were identified by comparison of graduation lists of fall quarter through summer quarter with teacher certification applications and student teaching records. These graduating groups had been surveyed every two years following graduation, but in order to maintain consistent sample sizes, random samples were selected for each survey. While some graduates participated in one or more of the previous surveys, others may not have had that opportunity. This study is cross-sectional, with no attempt to match data from individuals with that from prior studies.

Current mailing addresses were obtained from the alumni office, which maintains what is considered to be the most accurate list of current addresses for graduates. Those on the alumni mailing list that were part of the target group were identified for each cohort, and a random sample of 100 was selected from each cohort. When a questionnaire was returned by the postal service as undeliverable, the individual whose name was next in line (alphabetically) was selected as a replacement, so that the sample size of 100 for each cohort was maintained.

Instrumentation

The "Teacher Education Long-Range Follow-Up Survey" instrument consisted of five pages of questions and one page for comments, front and back covers. The instrument was photocopied on two sheets (front and back) of 8 1/2" by 14" (legal-size) blue paper that was folded and stapled in the middle to form a booklet of eight pages. The instrument contained three major sections: Employment History and Career Plans, Teaching Experience, and Background Information and Comments. Questions addressed in this study are shown in Figure 1. The employment history pattern categories were based on those used by Chapman (1984).

Figure 1 Variables and their Scale of Measurement

Demographics

1. Teacher certification program at UTK

<ul style="list-style-type: none"> 01 = Elementary, Early childhood education 02 = Art Education 03 = Music Education 04 = Health/Physical Education 05 = Special Education 06 = Business Education 07 = Distributive Education 08 = Agriculture Education 	<ul style="list-style-type: none"> 09 = Vocational Home Economics 10 = Industrial Arts Education 11 = English Education 12 = Foreign Language Education 13 = Mathematics Education 14 = Psychology 15 = Science Education 16 = Social Studies Education
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2. Gender (1 = male, 2 = female)
3. In what state do you currently reside? (1 = Tennessee, 2 = Other)
4. Do you currently live in ___ County or within 50 miles of ___ (university)? (1 = yes, 2 = no)
5. Do you currently live in the county in which you lived prior to attending (the university) or within 50 miles of the high school from which you graduated? (1 = yes, 2 = no)

Employment History and Career Plans

1. Please describe your present situation

<p>Employed in Education</p> <ul style="list-style-type: none"> 01 = Teacher in public school 02 = Teacher in private school 03 = Substitute teacher 04 = Aide 05 = Otherwise employed in the field of education as ___ <p>Employed Outside the Field of Education</p> <ul style="list-style-type: none"> 06 = Administrator, manager, owner of business 	<ul style="list-style-type: none"> 07 = Professional 08 = Sales worker 09 = Office/clerical worker 10 = Military 11 = Graduate student 12 = Housewife/househusband 13 = Unemployed 14 = Other _____
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2. Please describe your situation during the school year following completion of certification requirements. (Same response options as previous item.)
3. Do you plan to be teaching five years from now? (1 = Yes, 2 = No, 3 = Undecided)
4. Do you plan to be teaching ten years from now? (1 = Yes, 2 = No, 3 = Undecided)
5. Do you plan to teach until retirement? (1 = Yes, 2 = No, 3 = Undecided)
6. If you are not currently teaching, do you plan to seek a teaching position at some time in the future? (1 = Yes, 2 = No, 3 = Undecided)
7. Beginning with the school year after you received your teaching certificate, indicate the pattern that most closely approximates your employment history during the school year (September - May). (If you continued into graduate school, please begin with the first employment you sought after graduate school.)
 - 01 = Entered teaching and have taught regularly (every school year) since then
 - 02 = Entered teaching, have taught periodically, interspersed with periods of unemployment for personal reasons (child rearing, illness, graduate school)
 - 03 = Entered teaching, moved to other type(s) of employment and then resumed teaching
 - 04 = Entered teaching, moved to other type(s) of employment and am not now teaching
 - 05 = Entered teaching, moved into educational administration or counseling
 - 06 = Began work in another field, then entered teaching and am currently teaching.
 - 07 = Began work in another field, entered teaching but am not now teaching
 - 08 = Have never taught
 - 09 = Other _____

Teaching Experience

1. Counting 1988-89, how many years have you taught in public/private schools?
2. Are you still employed in the same school system in which you obtained your first teaching position? (1 = Yes, 2 = No, employed in another school system or private school, 3 = No, not teaching at present)

Procedures

Beginning in early April of 1989, the questionnaires were mailed, followed by a maximum of three follow-up reminders to nonrespondents. The second included another copy of the questionnaire. A total of 258 questionnaires were returned for analysis: 63 from the 1980 group, 60 from 1982, 66 from 1984, and 69 from 1986. The overall response rate was 64.3%. Frequency distributions were most appropriate for presentation of much of the data. Statistical analyses included chi-square, Pearson correlation, and Mann-Whitney tests. The .01 level was used to determine statistical significance because multiple tests were conducted.

When several cell sizes of original variables were small, categories of some variables were combined for analysis. To estimate future attrition, the undecided responses and yes responses were combined into a single category regarding future plans to distinguish them from responses of those who had decided not to teach in the future. Respondents who indicated they planned to teach five years in the future, ten years in the future, or until retirement were automatically considered as planning to teach at some time in the future. Current employment was classified as either teaching (public or private school) or not teaching. When examining job satisfaction by years of teaching experience, data were collapsed across graduation year cohorts. A new variable, career pattern, was created based on employment history and current employment. Those who reported that they had taught every year (Employment history category 1) and those who had never taught (Employment history category 8) comprised two of the career pattern categories. The other two career pattern categories were composed of those who had taught intermittently and were currently teaching (categories 3 and 6) and those who had taught intermittently but were not currently teaching (4, 5, and 7). Responses of intermittent teachers in employment history categories 2 and 9 were categorized as either 2 or 3 based on current occupation.

Respondents

Respondents were predominantly female and resided in the state in which the university is located (see Table 1). Over half of the respondents were living within 50 miles of the University, and even larger percentages of each cohort were within 50 miles of the high school they attended or in the same county in which they lived prior to attending the university. Elementary and early education majors comprised over one third of each respondent cohort. One third or more of each cohort were still teaching in the same school system in which they began teaching.

Results

Career Pattern

Over half of the graduates in each cohort were employed as public or private school teachers at the time of the survey, with a decline evident as the time since graduation increased (see Table 2). When employment categories were collapsed into teaching (public or private school) and not teaching, the difference between cohorts approached statistical significance ($X^2 = 8.40$, $df = 3$, $p = .038$), with higher percentages of teachers being found for the more recent graduates.

The percentage of each cohort employed as teachers in public or private schools during the school year following graduation was fairly consistent for the three cohorts that had been in the field the longest (42.9% to 45%). The 1986 cohort (68.1% who reported employment as teachers) was the exception.

Employment history patterns show a decline in percentage teaching every year (category 1) as the number of years beyond graduation increased (see Table 3). This is accompanied by an increase in the percentage who had never taught (category 8). Two thirds or more of those who began work in another field and then taught (categories 6 and 7) were teaching at the time of the survey.

Table 1

Characteristics

Characteristics	Percentage of Respondents			
	1980 (N=63)	1982 (N=60)	1984 (N=66)	1986 (N=69)
Gender				
Male	28.6	25.0	15.2	20.3
Female	71.4	75.0	84.8	79.7
Reside in state	81.0	70.0	75.8	76.8
Reside in county or within 50 miles of University	60.3	53.3	60.1	60.9
Reside in county in which graduate lived prior to attending university or within 50 miles of high school from which graduated	66.7	57.6	62.1	71.0
Teacher Certification Program				
Elementary/Early Childhood Ed.	42.9	46.7	56.0	36.2
Music Education	6.3	8.3	1.5	2.9
Health/Physical Education	15.9	13.3	7.7	2.9
Special Education	19.0	15.0	18.2	21.7
Business/Distributive Education	3.2	0.0	0.0	5.7
Agriculture Education	0.0	0.0	0.0	1.4
Vocational Home Economics	0.0	0.0	0.0	1.4
Industrial Arts Education	1.6	0.0	7.6	7.2
English Education	7.9	10.0	3.0	5.8
Foreign Language Education	1.6	0.0	0.0	1.4
Mathematics Education	6.3	3.3	9.1	7.2
Psychology	1.6	5.0	1.5	1.4
Science Education	4.8	8.3	3.0	7.2
Social Studies Education	4.8	6.7	1.5	4.3
Still employed by same school system in which first employed as teacher	34.9	40.0	42.4	53.6

Note. Percentages may not total 100% due to rounding and multiple certification areas.

Table 2

Employment

Employment	Percentage of Respondents			
	1980	1982	1984	1986
Current School Year				
Employed in Education				
Teacher in public school	52.4	53.3	65.2	69.6
Teacher in private school	0.0	5.0	4.5	2.9
Substitute teacher	4.8	1.7	3.0	1.5
Aide	0.0	1.7	0.0	1.5
Otherwise employed in the field of education	12.7	10.0	6.1	7.2
Employed Outside Education				
Administrator, manager, owner of business	6.3	10.0	4.5	5.8
Professional	4.8	8.3	0.0	2.9
Sales worker	7.9	5.0	3.0	2.9
Office/clerical worker	7.9	1.7	1.5	2.9
Military	0.0	1.7	0.0	0.0
Graduate school	3.2	3.3	7.6	7.2
Housewife/househusband	1.6	1.7	1.5	1.4
Unemployed	1.6	0.0	0.0	0.0
Other	4.8	5.0	6.1	2.9
No Response	0.0	0.0	3.0	0.0
School Year after Program Completion				
Employed in Education				
Teacher in public school	42.9	35.0	37.9	65.2
Teacher in private school	0.0	10.0	6.1	2.9
Substitute teacher	19.0	10.0	13.6	8.9
Aide	0.0	1.7	7.6	0.0
Otherwise employed in the field of education	7.9	1.7	9.1	2.9
Employed Outside Education				
Administrator, manager, owner of business	1.6	3.3	6.1	2.9
Professional	1.6	6.7	0.0	2.9
Sales worker	6.3	5.0	9.1	4.3
Office/clerical worker	6.3	3.3	6.1	14.4
Military	0.0	1.7	0.0	0.0
Graduate school	7.9	10.0	4.5	0.0
Housewife/househusband	0.0	0.0	3.0	0.0
Unemployed	1.6	0.0	0.0	0.0
Other	1.6	11.7	4.5	4.3
No response	9.5	8.3	6.1	4.3

Note. Column totals for first and current employment may not total 100% because of dual responses.

Table 3

Employment History^a

Pattern	Percentage of Respondents			
	1980	1982	1984	1986
1. Taught every school year after receiving certification	36.5	38.3	53.0	69.6
2. Entered teaching, then:				
2. taught periodically, interspersed with periods of unemployment for personal reasons (child rearing, illness, graduate school)	7.9	10.0	6.1	1.4
3. moved to other type(s) of employment and then resumed teaching	7.9	1.7	4.5	1.4
4. moved to other type(s) of employment and not currently teaching	7.9	13.3	1.5	4.3
5. moved into educational administration or counseling	3.2	1.7	0.0	1.4
Began work in another field, then entered teaching:				
6. currently teaching	6.3	15.0	10.6	5.8
7. not currently teaching	3.2	0.0	1.5	0.0
8. Have never taught	23.8	20.0	19.7	15.9
9. Other	3.3	5.0	3.0	0.0

^aEmployment (during the school year) beginning with the school year following receipt of teacher certification (or after graduate school if the graduate proceeded directly into graduate studies).

At three and five years after graduation, higher percentages of females had taught every year than males (see Table 4). At seven years, the two groups were balanced, and by nine years, males were more likely to have taught continuously than females. There

were no significant chi-square differences between genders across time on the percentages having taught continuously and for those having never taught. The percentage of females having interrupted teaching for personal reasons was higher than that for males for each cohort, but statistical comparisons were not conducted because of low expected frequencies.

Table 4
Teaching History by Gender

Group	Percentage of Respondents			
	1980	1982	1984	1986
1. Taught every year				
Males	55.6	33.3	40.0	64.3
Females	28.9	33.3	55.4	70.9
8. Never taught				
Males	27.8	40.0	10.0	21.0
Females	22.2	13.6	21.4	14.5
2. Entered teaching, have taught periodically, interspersed with periods of unemployment for personal reasons				
Males	0.0	6.7	0.0	0.0
Females	11.1	9.1	5.4	1.8

Chi-square comparison of the four cohorts on the created career pattern variable showed cohorts differed significantly ($X^2 = 31.65$, $df = 9$, $p = .0023$) with respect to career pattern (see Table 5). Further pairwise chi-square comparisons showed significant differences between between the 1980 and 1986 cohorts ($X^2 = 15.86$, $df = 3$, $p = .0012$) and between the 1982 and 1986 cohorts ($X^2 = 20.85$, $df = 3$, $p = .00011$). The difference between the 1980 and 1984 cohorts approached significance.

Table 5
Career Pattern by Cohort

Career Pattern	Percentage of Respondents							
	1980		1982		1984		1986	
	n	%	n	%	n	%	n	%
Taught every year	23	36.5	20	33.3	35	53.0	48	69.6
Intermittent-teaching	10	15.9	15	25.0	14	21.2	3	4.3
Intermittent-not teaching	15	23.8	13	21.7	4	6.1	7	10.1
Never taught	15	23.8	12	20.0	13	19.7	11	15.9

Future Plans

The concept of a career pattern may also include future plans regarding teaching. In response to questions regarding future plans (teaching five years from now, ten years from now, until retirement), patterns were irregular, with no clear pattern across cohorts (see Table 6). Within each cohort the percentage definitely planning to teach declined across future time while the percentage not planning to teach increased in three of the four cohorts. From 13.6 to 31.7 percent of the graduates from each cohort indicated they did not plan to teach in the future, thus withdrawing from the profession. Earlier graduates (1980 and 1982) were more likely to have made this decision than the more recent ones (1984 and 1986).

Lack of a clear progression across cohorts regarding future plans indicated that passage of time since graduation might be less influential on attrition than length of teaching experience. Cohorts were collapsed to provide information on future plans by length of teaching experience (see Table 7). Initial commitment (to be teaching in another five years) was fairly high at all levels of experience. Those completing their eighth year of teaching had the highest percentages of potential withdrawals at the end of an additional five and ten years, while the relatively inexperienced teachers (first and second

Table 6
Future Plans Regarding Teaching

Future Plan	Percentage of Respondents			
	1980	1982	1984	1986
Plan to be teaching five years from present				
Yes	56.5	47.5	57.6	57.4
Not sure	19.4	15.3	28.8	25.0
No	24.2	37.3	13.6	17.6
Plan to be teaching ten years from present				
Yes	37.1	40.7	40.9	39.7
Not sure	37.1	23.7	34.8	38.2
No	25.8	35.6	24.2	22.1
Plan to teach until retirement				
Yes	24.6	37.3	24.2	22.1
Not sure	45.9	27.1	47.0	48.5
No	29.5	35.6	27.3	29.4
Plan to teach sometime in the future				
Yes	58.7	48.3	59.1	58.8
Not sure	19.0	20.0	27.3	25.0
No	22.2	31.7	13.6	16.2

year) were least likely to leave the profession. The inexperienced teachers were, however, the most likely to leave before retirement. Approximately one fifth of the fifth year teachers also showed likelihood of leaving the profession by the end of another 10 years and before retirement. The intention to make teaching a lifelong career was highest for those with six and nine years of experience. The percentages of graduates who had decided to leave the profession were lower for the more recent graduates (1984 and 1986) than for the earlier graduates (1980 and 1982).

Comparison of planned attrition of graduates in the four career pattern categories did show distinct differences (see Table 8). All of those graduates with intermittent patterns who were teaching (category 2) planned to teach in the future; only 9% of those

Table 7

Future Attrition Plans of those Teaching by Years of Experience

Years Exp.	n	Percentage Who Plan Not to be Teaching			All ^a
		Five years From Present	Ten years From Present	Until Retirement	
1-2	8	0.0	0.0	28.6	0.0
3	47	8.5	12.8	19.1	6.4
4	24	4.2	12.5	12.5	4.2
5	32	9.4	18.8	21.9	9.4
6	9	11.1	11.1	11.1	11.1
7	14	7.1	14.3	14.3	7.1
8	13	14.3	28.6	21.4	14.3
9	15	0.0	20.0	0.0	0.0

^aAnswered no to all three future teaching items: five years, ten years, and until retirement

who had taught continuously (all cohorts collapsed) did not plan to teach again. Nearly half of those in the two nonteaching categories (intermittent-not teaching and never taught) did not plan to teach in the future. Examination of the future plans of those individuals who were teaching but indicated dissatisfaction with their jobs showed that fewer than one third had resolved not to be teaching five or ten years in the future.

Table 8

No Future Plans to Teach

Career Pattern	1980	1982	1984	1986	All
1. Taught every year	8.7	15.0	5.7	8.5	8.8
2. Intermittent-teaching	0.0	0.0	0.0	0.0	0.0
3. Intermittent-not teaching	26.7	61.5	50.0	57.1	46.2
4. Never taught	53.3	66.7	38.5	27.3	47.1
All	22.2	31.7	13.6	16.2	20.5

Job Satisfaction

Most graduates (81% or more) in each cohort expressed some degree of satisfaction with their jobs (see Table 9). The seven year graduates had the largest percentage (19%) who were dissatisfied. Mann-Whitney pairwise comparisons of the four career pattern groups showed no significant differences in job satisfaction between any two groups. A Mann-Whitney comparison of those who have taught continuously (career pattern 1) with the intermittent teachers who were teaching (career pattern 2) showed the two groups did not differ significantly on years of teaching experience or on job satisfaction. The two groups were subsequently collapsed to include all current teachers (n=163) when examining job satisfaction by length of teaching experience.

Table 9

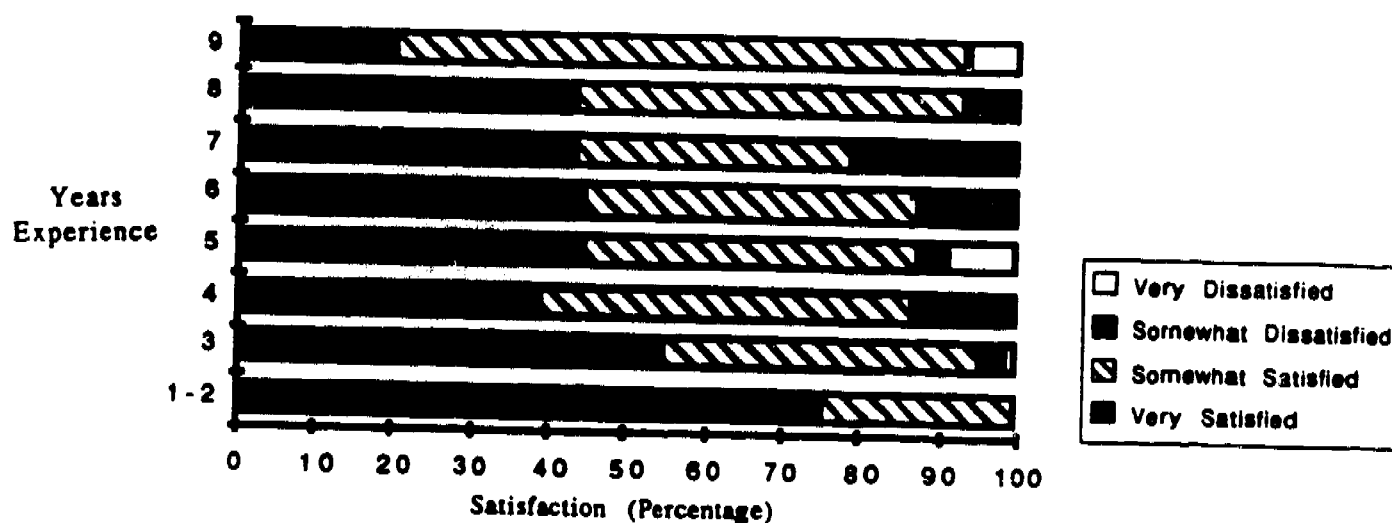
Job Satisfaction

Group	Satisfied		Dissatisfied	
	Very	Somewhat	Somewhat	Very
Cohort				
1980	45.0	45.0	5.0	5.0
1982	50.0	31.0	13.8	5.2
1984	49.2	42.9	3.2	4.8
1986	53.7	38.8	4.5	3.2
Career Pattern Groups				
Taught every year	47.2	43.2	6.4	3.2
Intermittent-Teaching	45.2	47.6	4.8	2.4
Intermittent-Not Teaching	59.4	21.9	12.5	12.9
Never taught	53.1	324.7	4.1	8.1

There was a decline in satisfaction up to the fourth year of teaching (see Figure 2). The fifth year teachers showed the highest percentage of very dissatisfied teachers, and

one fifth of the seven year teachers were at least somewhat dissatisfied. The nine year teachers were generally somewhat satisfied but had the smallest percentage of very satisfied individuals. A small but statistically significant negative Pearson correlation coefficient ($r = -.20$, $n = 163$, $p = .006$) was obtained when job satisfaction and years of teaching experience were correlated for those who were teaching at the time of the survey.

Figure 2. Job Satisfaction of Teaching Graduates by Years of Teaching Experience



Discussion

The description of the respondents might indicate that the program serves primarily local or instate residents. This is probably accurate, based on other research, but it is also possible that graduates who remain in the area are more loyal or committed to the institution and more likely to participate in university activities, such as the survey. The samples were drawn from mailing lists of the alumni association that conducts annual fund-raising programs, and the lists may well have been biased in that individuals who are distant from the institution or ones who do not desire to maintain contact with the institution have allowed their addresses to become obsolete or asked that their names be removed from the mailing lists.

The percentage of 1986 graduates who reported that they were teaching during the school year following graduation appears high in comparison with that of the three earlier groups. There are at least two possible causes for this: the demand for teachers had increased, making it easier for teachers to obtain positions; and the number of graduates of the teacher education program had declined so that there was less competition for jobs and a similar number of graduates teaching would have resulted in a higher percentage obtaining positions.

Over half of each cohort were employed as public or private school teachers at the time of the survey, although a decline was seen with each additional two years since graduation. While seemingly inconsistent with the high estimates of attrition during early years of teaching by Vance and Schlechty (1982), the differences may be attributed to variations in definitions of attrition and target groups. In this study, the percentages teaching refer to the percentage of a graduation cohort and include those with intermittent teaching employment. In the present study, delayed entry and reentry individuals that had become part of the teaching force were included when the survey was conducted. Because of the opportunity for those individuals to become part of the teaching group, the percentage of the graduation cohort teaching at any one time would be higher than studies that look only at the numbers of an original group of teachers who remain in teaching or who have left by a subsequent time. Both types of information have value, but identical information could not be expected from studies using the different methods.

It was anticipated that the percentage having taught every year since graduation would decrease over time, compensated by increases in intermittent teachers whose teaching had been interrupted for personal reasons. It was surprising to note that the percentages having never taught were higher for the earlier graduates. The 23.8% of the 1980 cohort never having taught is similar to the 25.2% found by Heyns (1988) for the 1972 high school graduates who could have had a maximum of ten years since graduation. However, the decline since 1980 in the present study indicates that the situation has

altered since that time. Members of the 1982 through 1986 cohorts have not been in the field comparable lengths of time, but the percentages never having taught could increase if the samples changed to favor those individuals. A more likely explanation is that the greater selectivity in program admissions and increasing requirements in the field (Career Ladder, etc.) have affected the pool of teacher education students so that students who had less commitment to the profession chose other majors while those completing the teacher preparation program were more strongly dedicated to the profession

The percentages exploring other career options increased over time, also graduates begin to shift focus within public schools and become administrators or counselors. Those who began work in another field then entered teaching were more likely to still be teaching than employed in another field, peaking with the seven-year cohort for which all who began work in another field were still teaching.

Current behavior tends to predict future commitment. Those who were teaching at the time of the survey, regardless of the length of time since graduation, were more likely to teach in the future than those not teaching. The longer graduates had delayed their entry into the teaching profession, the larger the percentage that had decided not enter at all. There was also a sharp increase in those not planning to teach in the future for earlier graduates (1980 and 1982). Overall, the percentages definitely planning to be teaching five years in the future ranged from 47.5 to 57.6 percent, distinctly different from the findings of (Heyns, 1988), who found that only 30.1% of those teaching in 1979-80 were still teaching five years later. If the graduates in the present study do as they have indicated they plan to do, differences would certainly be evident in five years, but the study methodology differences may well account for them because some of those intending to be teaching in five years are intermittent teachers who are not currently teaching and would not be counted if comparison only takes into account the behavior of those teaching during the base year, as was done by Heyns.

Job dissatisfaction does not appear to be the only motivation for teachers to leave the profession because the percentage for each cohort that had decided not to teach in the future exceeded the percentage either somewhat or very dissatisfied. As Grissmer and Kirby (1987) pointed out, the attractiveness of alternative occupations is a potential factor in deciding to leave teaching. Chapman (1983) has found job satisfaction for teachers to be related to several factors, only one of which is persistence.

The career pattern groups did not differ significantly, although the trends were similar to findings of Chapman (1986) that those having never taught did not differ significantly from those teaching. The relationship between years of teaching experience and job satisfaction is moderate and is not strictly a linear one, not unlike that found by Shirom and Mazeh (1988). Those teachers with the least amount of experience were most satisfied. The tendency of those who are less satisfied to leave the profession may be strongest at the completion of the fourth, fifth, and seventh years, because the highest percentages of dissatisfied teachers are evident at those levels of experience. This supports earlier research of Murnane, Singer, and Willett (1988) who predicted between five and six years as the first teaching spell for female teachers (who compose the majority of this group). The decreasing levels of satisfaction during the initial years may also be consistent with prior evidence that attrition is highest during the early years of teaching.

Changing conditions also play a role in making the decision whether to remain in one's present career or to make a change, and the conditions surrounding teaching and teacher preparation have undergone many changes recently. Career Ladder participation became mandatory in the state in which the institution is located during the 1984-85 school year. Graduates from previous years who had not yet entered the teaching force may have been deterred from doing so by the increased demands that might be placed on them for which they did not feel prepared. The relatively low teacher demand during the earlier years, coupled with larger numbers of teacher education graduates from the

institution, made it more difficult for them to obtain teaching positions than for those who graduated in 1984 and 1986.

It would be inappropriate to decide that if a graduate had not taught by a specified number of years after graduation that the individual did not intend to enter the profession. Even some of those who had not taught during the nine years following graduation still planned to teach in the future. It would also be misleading to conclude that those who enter other fields after graduation lack commitment to teaching. None of the teachers in the Intermittent-teaching category had made plans to leave the profession. It would be an oversimplification and probably erroneous to decide that data taken at any one point in time accurately reflects the contribution of a cohort to the teaching work force. Teachers delay entry, enter and leave at various times. If rates of attrition are operationalized as including those who have permanently left the profession, estimates taken at any particular point in time are likely to be overestimates if they do not take into consideration the future plans of the individuals. Conditions are constantly changing in the teaching profession, and there is a need for continuing research into the status of the profession and the commitment of those who are a part of it.

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